

WHAT IS CLAIMED IS:

1 1. A wireless telephone, including:

2 an enclosure;

3 an antenna; and

4 an antenna system, including,

5 a housing containing the antenna, the antenna housing being mounted

6 to the enclosure for movement between a first position to hold the antenna in a

7 retracted position and a second position for extending the antenna, and

8 a bias member coupled to the antenna housing to bias the antenna

9 housing toward the second position.

1 2. A wireless telephone of a type formed from first and second phone

2 parts pivotally joined together to allow the first phone part to open from a folded position
3 with the second phone part for use, the first and second phone parts forming an enclosure,
4 and including:

5 an antenna housing mounted to the second phone part for movement from a
6 first position within the second part to an extended position;

7 an antenna mounted in the housing;

8 a release element mounted to hold the antenna housing in the first position;

9 and

10 a bias member to bias the antenna housing to the extended position when the

11 release member is disposed to release the antenna housing.

1 3. The wireless telephone of claim 2, wherein the bias member is a

2 spring.

1 4. The wireless telephone of claim 3, wherein the bias member is a

2 helical spring.

1 5. The wireless telephone of claim 2, wherein the antenna housing is

2 pivotally mounted to the second phone part to pivot to the second position when released by

3 the release member.

1 6. The wireless telephone of claim 5, wherein the antenna is
2 telescopedically mounted in the antenna housing to be extracted from the antenna housing when
3 in the second position.

1 7. The wireless telephone of claim 2, the release member including tab
2 formed on the antenna housing, the first phone part having a recess formed and configured to
3 receive and hold the tab when the first phone part is in the folded position, holding the
4 antenna housing in the first position.

1 8 A wireless telephone, including:
2 an outer shell forming an enclosure having an opening;
3 an antenna holder mounted in the enclosure and having an end located
4 proximate the opening;
5 an antenna releasably held in the antenna holder for movement between a
6 retracted position within the antenna holder and a second position extending from the antenna
7 holder and through the opening;
8 a movable latch member mounted to releasably hold the antenna in the
9 antenna holder; and
10 a bias coupled to the antenna to move the antenna from the first position to the
11 second position when the moveable latch member is moved to release the antenna.

1 9. A wireless telephone, including:
2 an enclosure for housing working elements of the wireless telephone, the
3 enclosure having at least a partial recess;
4 an antenna system, including,
5 an antenna,
6 a housing, containing the antenna, pivotally mounted to the enclosure
7 for movement between a retracted position and an extended position; the recess being
8 formed and configured to hold the housing when in the retracted position, and
9 a bias member coupled to the antenna housing to bias the antenna
10 housing toward the second position.

1 10. The wireless telephone of claim 9, wherein the enclosure includes a
2 first phone part and a second phone part pivotally joined for the first phone part to move from
3 a folded position juxtaposed with the second phone part to an open position, there being

4 formed in the first part a barrel having a notch, the housing having a terminal end with a tab
5 formed to extend therefrom captured by the barrel, whereby the housing is released to move
6 toward the second position when the first phone part rotates from the folded position to the
7 second position to let the tab pass through the notch.

1 11. A wireless telephone of a type having an enclosure for housing
2 working and electronic elements of the wireless telephone, the enclosure having at least a
3 partial recess, and including

4 an antenna system, including,
5 an antenna,
6 a housing, containing the antenna, pivotally mounted to the enclosure
7 for movement between a retracted position and an extended position; the recess being
8 formed and configured to hold the housing when in the retracted position, and
9 a captivation system, including a detent, to releaseably hold the
10 housing in the retracted and extended positions.

1 12. The wireless telephone of claim 11, wherein the detent includes a
2 spring mounted to the enclosure and a detent member mounted to the housing.

1 13. The wireless telephone of claim 12, including a bend in the spring, and
2 wherein the detent member has formed therein first and second notches, spring and detent
3 member being positioned so that the first notch matingly engages the bend to hold the
4 housing in the retracted position and the second notch matingly engages the bend to hold the
5 housing in the extended position.

1 14. The wireless telephone of claim 11, the wherein the antenna is
2 movably mounted to telescopically extend from and retract into the housing.